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IN THE CLAIMS:

Please replace the previous claims with the following claims:

1-30. (Canceled)

31. (currently amended) A cable headend for a television program delivery system ~~which uses a plurality of video signals and instructions, and wherein set top terminals communicate with the cable headend, the cable headend comprising:~~

a signal processor processing means for processing a plurality of video signals comprising:

means for receiving a plurality of video signals;

means for selecting video signals from the plurality of video signals; and

combiner means for combining the selected video signals for distribution

to set top terminals, wherein the combiner means comprises:

a plurality of first-in-first-out storage means, each first-in-first-out storage means for storing packets from a single digital program and outputting the packets to an associated output means;

a plurality of the associated output means connected to a serializing means;

first-in-first-out control means for monitoring the number of video packets input to and output from each of the plurality of first-in-first-out storages, sending a control signal to a computer processing means when an individual first-in-first-out storage means is reaching capacity, and opening and closing the plurality of output means to maintain a constant output of the serializing means;

a network controller for controlling the operation of the signal processor and the set top terminals comprising:

means for obtaining communications from the set top terminals;

[[a]] the computer processor processing means, connected to the obtaining means, for generating instructions to the signal processor using the communications from the set top terminals; and

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means for transferring the instructions to the signal processor processing means to be used for selecting video signals; and

a means for distributing the combined video signals to the set top terminals.

32-46. (Cancelled)

47. (currently amended) A cable headend system, ~~for cherry-picking desired digital programs or channels from one or more multiplexed signals~~ comprising:

a CPU, wherein the CPU manages[[,]] and monitors, ~~ensures that the desired digital programs or channels are selected from at least one multiplexed signal~~, and sends instructions;

a demultiplexer, wherein the demultiplexer receives the at least one multiplexed signal[[s]], performs selection of the desired programs ~~or channels~~ according to the instructions sent from the CPU, and outputs the selected programs ~~or channels~~;

a combiner, wherein the combiner accepts the outputted selected programs ~~or channels~~ from the demultiplexer and combines the selected programs ~~or channels~~ into a combined signal for transmission according to instructions sent from the CPU, wherein the combiner comprises:

a plurality of first-in-first-out storages, each first-in-fist-out storage storing packets from a single digital program and outputting the packets to an associated output gate;

a plurality of the associated output gates connected to a serializer;
first-in-first-out control logic for monitoring the number of video packets input to and output from each of the plurality of first-in-first-out storages, sending a control signal to the CPU when an individual first-in-first-out storage is reaching capacity, and opening and closing the plurality of output gates to maintain a constant output of the serializer; and

~~wherein the CPU manages and monitors the demultiplexer and the combiner.~~

48. (currently amended) The system of claim 47, wherein the demultiplexer separates the multiplexed signals into individual digital programs ~~or channels~~.

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49. (currently amended) The system of claim 47 further comprising a local insertion device, wherein the local insertion device receives ~~one or more~~ at least one local program[[s]] and outputs ~~the at least one one or more~~ local program[[s]] to the combiner, and wherein the combiner combines the output local program[[s]] with the selected programs ~~or channels~~.

50-66. (cancelled)

67. (currently amended) A method, ~~for cherry-picking desired digital programs or channels from one or more multiplexed signals~~ comprising the steps of:

receiving information and at least one ~~one or more~~ multiplexed signal[[s]] containing a plurality of digital programs ~~or channels~~, wherein the information includes data on identities of the desired digital programs ~~or channels~~;

generating instructions regarding the desired digital programs ~~or channels~~; wherein the instructions are generated using the received information;

selecting the desired digital programs ~~or channels~~ using the generated instructions, wherein the selected digital programs ~~for channels~~ are a subset of the plurality of digital programs ~~or channels~~ contained in the at least one multiplexed signal[[s]]; and

combining the selected digital programs ~~or channels~~ into a combined signal for transmission, wherein the combining comprises:

for each selected digital program, storing packets from the selected digital program in one of a plurality of first-in-first-out storages and outputting the packets from the first-in-first-out storage to an associated output gate connected to a serializer;

using control logic for monitoring the number of video packets input to and output from each of the plurality of first-in-first-out storages, sending a control signal to a processor when an individual first-in-first-out storage is reaching capacity, and opening and closing the plurality of output gates to maintain a constant output of the serializer.

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68. (currently amended) The method of claim 67, further comprising the step of demultiplexing the multiplexed signals into individual digital programs ~~or channels~~.

69. (currently amended) The method of claim 67 further comprising the step of: inserting ~~one or more~~ at least one local program[[s]], wherein the local program[[s]] are is combined with the selected digital programs ~~or channels~~ in the combining step.

70. (currently amended) A method ~~for filtering unwanted digital programs or channels from one or more multiplexed signals~~, comprising the steps of:
receiving information and ~~one or more~~ at least one multiplexed signal[[s]] containing a plurality of digital programs ~~or channels~~, wherein the information includes data on identities of the digital programs ~~or channels~~;

generating instructions regarding the digital programs ~~or channels~~, wherein the instructions are based on the received information;

removing unwanted digital programs ~~or channels~~ using the generated instructions, wherein the unwanted digital programs ~~or channels~~ are a subset of the plurality of digital programs ~~or channels~~ contained in the at least one multiplexed signal[[s]] and whereby removing the unwanted digital programs ~~or channels~~ leaves the remaining plurality of digital programs ~~or channels~~ ~~contained in the multiplexed signal~~; and

combining the remaining plurality of digital programs ~~or channels~~ into a combined signal for transmission, wherein the combining comprises:

for each remaining digital program, storing packets from the remaining digital program in one of a plurality of first-in-first-out storages and outputting the packets from the first-in-first-out storage to an associated output gate connected to a serializer;

using control logic for monitoring the number of video packets input to and output from each of the plurality of first-in-first-out storages, sending a control signal to a processor when an individual first-in-first-out storage is reaching capacity, and opening and closing the plurality of output gates to maintain a constant output of the

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serializer.

71. (currently amended) The method of claim 70, further comprising the step of demultiplexing the at least one multiplexed signal[[s]] into individual digital programs ~~or~~ channels.

72. (currently amended) The method of claim 70 wherein the information received includes identities of the unwanted digital programs ~~or~~ channels.

73. (currently amended) The method of claim 70 wherein the generated instructions comprise identities of the unwanted digital programs ~~or~~ channels and whereby the removing step uses the generated instructions to remove the unwanted digital programs ~~or~~ channels.

74. (currently amended) A method, ~~for cherry-picking desired digital programs or channels from a multiplexed signal~~ comprising the steps of:

receiving information and a multiplexed signal containing a plurality of digital programs ~~or~~ channels, wherein the information includes data on identities of the desired digital programs ~~or~~ channels;

generating instructions regarding the desired digital programs ~~or~~ channels, wherein the instructions are generated using the received information;

selecting the desired digital programs ~~or~~ channels using the generated instructions, wherein the selected digital programs or channels are a subset of the plurality of digital programs ~~or~~ channels contained in the multiplexed signal; and

combining the selected digital programs ~~or~~ channels into a combined signal for transmission, wherein the combining comprises:

for each selected digital program, storing packets from the selected digital program in one of a plurality of first-in-first-out storages and outputting the packets from the first-in-first-out storage to an associated output gate connected to a serializer;

using control logic for monitoring the number of video packets input to and output from each of the plurality of first-in-first-out storages, sending a control signal to

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a processor when an individual first-in-first-out storage is reaching capacity, and opening and closing the plurality of output gates to maintain a constant output of the serializer.

75. (currently amended) The method of claim 74 wherein the combining step comprises a serializer combining the selected digital programs ~~or channels~~ into a combined signal for transmission.

76. (currently amended) The method of claim 74 wherein the selecting step comprises digital logic selecting the desired digital programs ~~or channels~~ using the generated instructions.

77. (currently amended) A method, ~~for cherry-picking desired digital programs or channels from a multiplexed signal~~ comprising the steps of:

receiving information and a plurality of multiplexed signals, each multiplexed signal containing a plurality of digital programs ~~or channels~~, wherein the information includes data on identities of the desired digital programs ~~or channels~~;

generating instructions regarding the desired digital programs ~~or channels~~, wherein the instructions are generated using the received information;

selecting the desired digital programs ~~or channels~~ using the generated instructions, wherein the selected digital programs or channels are a subset of the plurality of digital programs ~~or channels~~ contained in the multiplexed signals; and

combining the selected digital programs ~~or channels~~ into a combined signal for transmission, wherein the combining comprises:

for each selected digital program, storing packets from the selected digital program in one of a plurality of first-in-first-out storages and outputting the packets from the first-in-first-out storage to an associated output gate connected to a serializer;

using control logic for monitoring the number of video packets input to and output from each of the plurality of first-in-first-out storages, sending a control signal to a processor when an individual first-in-first-out storage is reaching capacity, and opening and closing the plurality of output gates to maintain a constant output of the

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serializer.

78. (currently amended) The method of claim 77 wherein the combining step comprises a serializer combining the selected digital programs ~~or channels~~ into a combined signal for transmission.

79. (currently amended) The method of claim 77 wherein the selecting step comprises digital logic selecting the desired digital programs ~~or channels~~ using the generated instructions.

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